PCT/09#4 con Processing Date: 11/5/2001 CRF Errors Corrected by the STIC Systems Branch Edited by: Vorlflod by: Changed a lile from non-ASCII to ASCII Changed the margins in cases where the sequence text was "wrapped" down to the next line. Edited a format error in the Current Application Data section, specifically: Edited the Current Application Data section with the actual current number. The number inputted by the applicant was
the prior application data; or other _ Added the mandatory heading and subheadings for "Current Application Data". Edited the Number of Sequences' field. The applicant spelled out a number instead of using an integer. Changed the spelling of a mandatory field (the headings or subheadings), specifically: Corrected the SEO ID NO when obviously incorrect. The sequence numbers that were edited were: Inserted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited: Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place. Inserted colons after headings/subheadings. Headings edited included: \cdot,\cdot,\cdot,\cdot Deleted extra, invalid, headings used by an applicant, specifically: Deletod: non-ASCII garbago at the beginning/end of files: secretary initials/filename at end of file; page numbers throughout text; other invalid text, such as ____ Inserted mandatory headings, specifically: Corrected an edvious error in the response, specifically: Edited identifiers where upper case is used but lower case is required, or vice versa. Corrected an orror in the Number of Sequences field, specifically: A "Hard Pago Break" code was inserted by the applicant. All occurrences had to be deleted. Deloted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error duo to a Patentin bug). Sequences corrected: _____ Other:

Examiner: The above corrections must be communicated to the applicant in the first Office Acides DO NOT send a copy of this form.

PCT09

DATE: 11/05/2001

TIME: 13:41:44

```
Input Set : A:\ES.PTO.MH.txt
                    Output Set: N:\CRF3\11052001\1869185.raw
     3 <110> APPLICANT: Ashikari, Toshihiko
     4 Ochiai, Misa
     6 <120> TITLE OF INVENTION: Method of Breeding Yeast
     8 <130> FILE REFERENCE: 46221
    10 <140> CURRENT APPLICATION NUMBER: US 09/869,185
    12 <141> CURRENT FILING DATE: 2001-06-25
                                                                  ENTERED
    14 <150> PRIOR APPLICATION NUMBER: PCT/JP00/07491
    16 <151> PRIOR FILING DATE: 2000-10-26
    18 <160> NUMBER OF SEQ ID NOS: 28
    20 <210> SEQ ID NO: 1
    22 <211> LENGTH: 34
    24 <212> TYPE: DNA
    26 <213> ORGANISM: Artificial Sequence
     28 <220> FEATURE:
    30 <223> OTHER INFORMATION: The FRT sequence used in the present invention contains SEQ
ID NO:1
    32 <400> SEQUENCE: 1
    33 gaagtteeta taetttetag agaataggaa ette
                                                                           34
    36 <210> SEQ ID NO: 2
     38 <211> LENGTH: 31
    40 <212> TYPE: DNA
    42 <213> ORGANISM: Artificial Sequence
    44 <220> FEATURE:
    46 <223> OTHER INFORMATION: FRT2 which is one of a pair of FRT sequences (FRT2/FRT102)
used in a DNA
             construct of the present invention
    47
     49 <400> SEQUENCE: 2
                                                                           31
     50 gaagtteeta taetttetag agaataggaa e
     53 <210> SEQ ID NO: 3
     55 <211> LENGTH: 31
     57 <212> TYPE: DNA
     59 <213> ORGANISM: Artificial Sequence
    61 <220> FEATURE:
    63 <223> OTHER INFORMATION: FRT102 which is one of a pair of FRT sequences (FRT2/FRT102)
used in a DNA
             construct of the present invention
    66 <400> SEQUENCE: 3
                                                                           31
     67 gttcctatac tttctagaga ataggaactt c
    70 <210> SEQ ID NO: 4
    72 <211> LENGTH: 28
     74 <212> TYPE: DNA
     76 <213> ORGANISM: Artificial Sequence
    78 <220> FEATURE:
     80 <223> OTHER INFORMATION: FRT2W sequence reconstructed by recombination from a pair of
FRT sequences
     81
             (FRT2/FRT102)
     83 <400> SEQUENCE: 4
                                                                           28
     84 gttcctatac tttctagaga ataggaac
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/869,185

87 <210> SEQ ID NO: 5 89 <211> LENGTH: 29 91 <212> TYPE: DNA

DATE: 11/05/2001

TIME: 13:41:44

PATENT APPLICATION: US/09/869,185 Input Set : A:\ES.PTO.MH.txt Output Set: N:\CRF3\11052001\1869185.raw 93 <213> ORGANISM: Artificial Sequence 95 <220> FEATURE: 97 <223> OTHER INFORMATION: FRT3 which is one of a pair of FRT sequences (FRT3/FRT103) used in a DNA 98 construct of the present invention 100 <400> SEQUENCE: 5 29 101 qaagttoota tactttotag agaatagga 104 <210> SEQ ID NO: 6 106 <211> LENGTH: 30 108 <212> TYPE: DNA 110 <213> ORGANISM: Artificial Sequence 112 <220> FEATURE: 114 <223> OTHER INFORMATION: FRT103 which is one of a pair of FRT sequences (FRT3/FRT103) used in a DNA 115 construct of the present invention 117 <400> SEQUENCE: 6 30 118 ttcctatact ttctagagaa taggaacttc 121 <210> SEQ ID NO: 7 123 <211> LENGTH: 25 125 <212> TYPE: DNA 127 <213> ORGANISM: Artificial Sequence 129 <220> FEATURE: 131 <223> OTHER INFORMATION: FRT3W sequence reconstructed by recombination from a pair of FRT sequences 132 (FRT3/FRT103) 134 <400> SEQUENCE: 7 25 135 ttcctatact ttctagagaa tagga 138 <210> SEQ ID NO: 8 140 <211> LENGTH: 27 142 <212> TYPE: DNA 144 <213> ORGANISM: Artificial Sequence 146 <220> FEATURE: 148 <223> OTHER INFORMATION: FRT4 which is one of a pair of FRT sequences (FRT4/FRT104) used in a DNA construct of the present invention 149 151 <400> SEQUENCE: 8 27 152 gaagttccta tactttctag agaatag 155 <210> SEQ ID NO: 9 157 <211> LENGTH: 27 159 <212> TYPE: DNA 161 <213> ORGANISM: Artificial Sequence 163 <220> FEATURE: 165 <223> OTHER INFORMATION: FRT104 which is one of a pair of FRT sequences (FRT4/FRT104) used in a DNA 166 construct of the present invention 168 <400> SEQUENCE: 9 27 169 ctatactttc tagagaatag gaacttc 172 <210> .SEQ ID NO: 10 174 <211> LENGTH: 20 176 <212> TYPE: DNA 178 <213> ORGANISM: Artificial Sequence 180 <220> FEATURE:

182 <223> OTHER INFORMATION: FRT4W sequence reconstructed by recombination from a pair of

RAW SEQUENCE LISTING

FRT sequences
183 (FRT4/FRT104)

DATE: 11/05/2001

TIME: 13:41:44

```
Input Set : A:\ES.PTO.MH.txt
                     Output Set: N:\CRF3\11052001\1869185.raw ...
    185 <400> SEQUENCE: 10
                                                                             20
    186 ctatactttc tagagaatag
    189 <210> SEQ ID NO: 11
    191 <211> LENGTH: 40
    193 <212> TYPE: DNA
    195 <213> ORGANISM: Artificial Sequence
    197 <220> FEATURE:
    199 <223> OTHER INFORMATION: Oligonucleotide synthesized to insert the FRT1-a sequence
(including wild-
               type FRT sequence) into a plasmid
    200
    202 <400> SEQUENCE: 11
                                                                             40
    203 tcgacgaagt tcctatactt tctagagaat aggaacttcg
    206 <210> SEQ ID NO: 12
    208 <211> LENGTH: 40
     210 <212> TYPE: DNA
     212 <213> ORGANISM: Artificial Sequence
     214 <220> FEATURE:
    216 <223> OTHER INFORMATION: Oligonucleotide synthesized to insert the FRT1-b sequence
(including wild-
               type FRT sequence) into a plasmid
    217
     219 <400> SEQUENCE: 12
                                                                             40
     220 aattcgaagt tcctattctc tagaaagtat aggaacttcg
     223 <210> SEQ ID NO: 13
    225 <211> LENGTH: 44
    227 <212> TYPE: DNA
     229 <213> ORGANISM: Artificial Sequence
     231 <220> FEATURE:
    233 <223> OTHER INFORMATION: Oligonucleotide synthesized to insert the FRT101-a sequence
(including
              wild-type FRT sequence) into a plasmid
    234
    236 <400> SEQUENCE: 13
                                                                             44
    237 agcttgaagt tcctatactt tctagagaat aggaacttcg catg
     240 <210> SEQ ID NO: 14
     242 <211> LENGTH: 36
     244 <212> TYPE: DNA
     246 <213> ORGANISM: Artificial Sequence
     248 <220> FEATURE:
     250 <223> OTHER INFORMATION: Oligonucleotide synthesized to insert the FRT101-b sequence
(including
               wild-type FRT sequence) into a plasmid
    251
     253 <400> SEQUENCE: 14
     254 cgaagttcct attctctaga aagtatagga acttca
                                                                             36
     257 <210> SEQ ID NO: 15
     259 <211> LENGTH: 16
     261 <212> TYPE: DNA
     263 <213> ORGANISM: Artificial Sequence
     265 <220> FEATURE:
     267 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT2-a sequence
     269 <400> SEQUENCE: 15
                                                                             16
     270 ctagagaata ggaacg
     273 <210> SEQ ID NO: 16
     275 <211> LENGTH: 16
     277 <212> TYPE: DNA
```

RAW SEOUENCE LISTING

PATENT APPLICATION: US/09/869,185

RAW SEQUENCE LISTING DATE: 11/05/2001 PATENT APPLICATION: US/09/869,185 TIME: 13:41:44

Input Set : A:\ES.PTO.MH.txt

Output Set: N:\CRF3\11052001\1869185.raw

279 <213> ORGANISM: Artificial Sequence 281 <220> FEATURE: 283 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT2-b sequence 285 <400> SEQUENCE: 16 16 286 aattcgttcc tattct 289 <210> SEQ ID NO: 17 291 <211> LENGTH: 18 293 <212> TYPE: DNA 295 <213> ORGANISM: Artificial Sequence 297 <220> FEATURE: 299 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT102-a sequence 301 <400> SEQUENCE: 17 18 302 agettgttcc tatacttt 305 <210> SEQ ID NO: 18 307 <211> LENGTH: 18 309 <212> TYPE: DNA 311 <213> ORGANISM: Artificial Sequence 313 <220> FEATURE: 315 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT102-b sequence 317 <400> SEQUENCE: 18 18 318 ctagaaagta taggaaca 321 <210> SEQ ID NO: 19 323 <211> LENGTH: 14 325 <212> TYPE: DNA 327 <213> ORGANISM: Artificial Sequence 329 <220> FEATURE: 331 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT3-a sequence 333 <400> SEQUENCE: 19 14 334 ctagagaata ggag 337 <210> SEQ ID NO: 20 339 <211> LENGTH: 14 341 <212> TYPE: DNA 343 <213> ORGANISM: Artificial Sequence 345 <220> FEATURE: 347 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT3-b sequence 349 <400> SEQUENCE: 20 14 350 aattctccta ttct 353 <210> SEQ ID NO: 21 355 <211> LENGTH: 16 357 <212> TYPE: DNA 359 <213> ORGANISM: Artificial Sequence 361 <220> FEATURE: 363 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT103-a sequence 365 <400> SEQUENCE: 21 366 agctttccta tacttt 16 369 <210> SEQ ID NO: 22 371 <211> LENGTH: 16

373 <212> TYPE: DNA

375 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING DATE: 11/05/2001 PATENT APPLICATION: US/09/869,185 TIME: 13:41:44

Input Set : A:\ES.PTO.MH.txt

Output Set: N:\CRF3\11052001\1869185.raw

377 <220> FEATURE: 379 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT103-b sequence 381 <400> SEQUENCE: 22 16 382 ctagaaagta taggaa 385 <210> SEQ ID NO: 23 387 <211> LENGTH: 12 389 <212> TYPE: DNA 391 <213> ORGANISM: Artificial Sequence 393 <220> FEATURE: 395 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT4-a sequence 397 <400> SEQUENCE: 23 12 398 ctagagaata gg 401 <210> SEQ ID NO: 24 403 <211> LENGTH: 12 405 <212> TYPE: DNA 407 <213> ORGANISM: Artificial Sequence 409 <220> FEATURE: 411 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT4-b sequence 413 <400> SEQUENCE: 24 12 414 aattcctatt ct 417 <210> SEQ ID NO: 25 419 <211> LENGTH: 14 421 <212> TYPE: DNA 423 <213> ORGANISM: Artificial Sequence 425 <220> FEATURE: 427 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT104-a sequence 429 <400> SEQUENCE: 25 430 agcttctata cttt 433 <210> SEQ ID NO: 26 435 <211> LENGTH: 14 437 <212> TYPE: DNA 439 <213> ORGANISM: Artificial Sequence 441 <220> FEATURE: 443 <223> OTHER INFORMATION: Sequence of synthetic DNA used to prepare FRT104-b sequence 445 <400> SEQUENCE: 26 14 446 ctagaaagta taga 448 <210> SEQ ID NO: 27 450 <211> LENGTH: 29 452 <212> TYPE: DNA 454 <213> ORGANISM: Artificial Sequence 456 <220> FEATURE: 458 <223> OTHER INFORMATION: Oligonucleotide (GIN-1) synthesized to prepare a plasmid containing GIN11 460 <400> SEQUENCE: 27 29 461 tggatccgga atttcgacgg atcaataac 464 <210> SEQ ID NO: 28 466 <211> LENGTH: 35 468 <212> TYPE: DNA 470 <213> ORGANISM: Artificial Sequence

472 <220> FEATURE:

VERIFICATION SUMMARY

DATE: 11/05/2001

PATENT APPLICATION: US/09/869,185

TIME: 13:41:45

Input Set : A:\ES.PTO.MH.txt

Output Set: N:\CRF3\11052001\1869185.raw